Joint Computer Conference). A reference treating at some length the use of delay lines for implementing buffer memories as used in the present invention may be found in "Wire-Type Acoustic Delay Lines For Digital Storage", by G. G. Scarrott and R. Naylor (Proceedings IEE, London, Volume 103, Part B, Convention on Digital Computer Technology, April 1956). Magnetic tape data recording as used in the present invention may be accomplished generally in accordance with the article entitled "Magnetic Data Recording Theory: Head Design" by A. S. Hoagland (Trans. AM. INST. ELEC. ENGRS., Volume 75, part 1, November 1956). Regarding timing, control and display of information, refer to Technical Memorandum ESL-TM-167, by Robert H. Stotz, 1963. With respect to information display, refer to the Technical Note by Robert A. Koster in the sixth national symposium on information display, September 1965. With respect to logic unit design and implementation, refer to Proceedings of the 1967 Spring Joint Computer Conference, containing several technical papers with practical examples on numerous implementations. In particular, refer to the paper entitled "Logic Design of Macromodules" by M. J. Stucki, S. M. Ornstein and W. A. Clark.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows.

1. A source data entry terminal device for capturing and storing data for future processing or the like, comprising in combination: a keyboard data entry means for producing coded alphanumeric data representative of different keys upon actuation thereof; an optical display means for visual character read-out of such data; means for coupling coded data entered into said terminal to a data recorder or reproducer means; and a programmed microprocessor interfaced to each of said entry means, said display means and said coupling means; said microprocessor including a fixed-program read-only memory and a central logic unit embodying substantially all of the control logic for said entry means and display means; said read-only memory having a built-in program dedicating the terminal to a particular functional configuration and establishing an instruction set which time-shares said central logic unit with said entry means and display means to control the same in conformance with such functional configuration.

2. The data entry terminal of claim **1**, wherein said read-only memory comprises a wired memory device.

3. The data entry terminal of claim **1**, including a buffer memory interfaced to said microprocessor for temporary storage of said data; said microprocessor program causing storage of such data in said buffer memory upon initial production thereof by said entry means and when the data is visibly read out by said display.

4. The data entry terminal of claim **3**, wherein said buffer memory comprises a delay line-type memory.

5. The data entry terminal of claim **1**, wherein said data recorder or reproducer means comprises a magnetic tape recorder and said coupling means comprises means interfacing said tape recorder with said microprocessor; said central logic unit also embodying control logic for said recorder, and said read-only memory program instruction set time-sharing said central logic unit with said recorder as well as with said entry means and display means.

6. The data entry terminal of claim **5**, wherein said tape recorder is of the type which records upon and replays cassette-type tape magazines comprising generally flat cartridges wholly enclosing a length of recording tape on the order of one-eighth inch wide.

7. The data entry terminal of claim **5**, further including a buffer memory interfaced to said microprocessor for temporary storage of said coded data; said microprocessor program causing storage of such data in said buffer memory upon initial production thereof by said entry means and when the data is visibly read out by said display.

8. The data entry terminal of claim **7**, wherein said buffer memory comprises a delay line memory.

9. The data entry terminal of claim **1**, wherein said coupling means comprises a communications link for connecting the terminal to a remote data processing station, memory bank or another like terminal.

10. The data entry terminal of claim **1**, wherein said microprocessor further includes means providing multiple-location working storage.

11. The data entry terminal of claim **10**, wherein said last means includes a plurality of registers.

12. The data entry terminal of claim **11**, wherein said logic unit includes a program counter, and wherein at least one of said registers comprises an exclusive storage element for program counter addressing.

13. The data entry terminal of claim **11**, wherein at least one of said registers comprises an accumulator for logic unit instructions.

14. The data entry terminal of claim **11**, wherein said logic unit includes a program counter and at least one of said registers comprises an exclusive storage element for program counter addressing, and wherein at least one of said registers comprises an accumulator for logic unit instructions.

15. The data entry terminal of claim **1**, wherein said microprocessor includes a plurality of read/write latch storage locations, and wherein said keyboard data entry means is interfaced to said logic unit by one or more of said latches.

16. The data entry terminal of claim **3**, wherein said microprocessor includes a plurality of read/write latch storage locations, and wherein said keyboard data entry means and said buffer memory are each interfaced to said logic unit by certain of said latches.

17. The data entry terminal of claim **16**, wherein said data recorder or reproducer means comprises a magnetic tape recorder and said coupling means comprises certain of said latches interfacing said tape recorder with said microprocessor; said central logic unit also embodying control logic for said recorder, and said read-only memory program instruction set time-sharing said central logic unit with said recorder as well as with said entry means and display means.

18. The data entry terminal of claim **17**, wherein said microprocessor further includes multiple-register working storage.

19. A source data entry terminal device for capturing and storing data for future processing or the like, comprising in combination: a keyboard data entry means for producing coded alphanumeric data representative of different keys upon actuation thereof; an optical display means for visual read-out of data characters entered by said keyboard means; a magnetic tape recorder/reproducer means including at least one cassette-type magnetic tape magazine, for recording data